

The opinion in support of the decision being entered today was **not** written for publication and is **not** binding precedent of the Board.

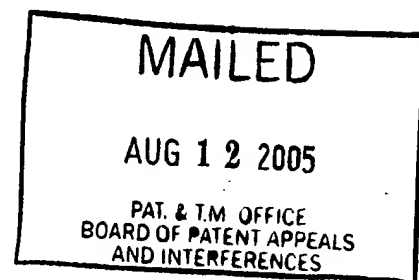
UNITES STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Ex parte RALF REIMELT, HERBERT SCHROTH, and ARMIN WENDLER

Appeal No. 2005-1530
Application 09/899,502

ON BRIEF¹



Before THOMAS, BLANKENSHIP, AND MACDONALD, **Administrative Patent Judges**.
MACDONALD, **Administrative Patent Judge**.

DECISION ON APPEAL

This is a decision on appeal from the final rejection of claims 13-31. Claims 1-12 have been canceled.

We **AFFIRM-IN-PART**.

¹ Appellants attendance at the oral hearing set for this appeal on August 10, 2005, was waived.

Invention

Appellants' invention relates to an apparatus for determining the fill level of a product or the position of the interface between two media or phases in a container as discussed at page 2, line 9, through page 3, line 3 of Appellants' brief.

Claim 13 is representative of the claimed invention and is reproduced as follows:

13. An apparatus for determining and/or monitoring the filling level of a product or position of the interface between two media or phases in a container, comprising:

a signal-generating unit which generates high-frequency measuring signals;

a waveguide which comprises a wire cable having a plurality of individual wires of a predetermined diameter which are twisted together;

a coupling-in unit for coupling in onto said waveguide the measuring signals, said waveguide extending in the direction of the product when the apparatus is mounted on the container; and

a receiving/evaluating unit for determining the filling level of the product or the position of the interface in the container via the delay time of the measuring signals reflected at the surface or interface of the product.

References

The references relied on by the Examiner are as follows:

Feese	4,171,609	October 23, 1979
Bachmann et al. (Bachmann)	4,976,509	December 11, 1990
Lutke et al. (Lutke)	6,229, 476	May 8, 2001

Rejections At Issue

Claims 13-20 stand rejected under 35 U.S.C. § 103 as being obvious over the combination of Lutke and Feese.

Claims 21-31 stand rejected under 35 U.S.C. § 103 as being obvious over the combination of Lutke and Bachmann.

Throughout our opinion, we make references to the Appellants' briefs, and to the Examiner's Answer for the respective details thereof.²

OPINION

With full consideration being given to the subject matter on appeal, the Examiner's rejections and the arguments of the Appellants and the Examiner, for the reasons stated *infra*, we affirm the Examiner's rejection of claims 13-20 under 35 U.S.C. § 103; and we reverse the Examiner's rejection of claims 21-31 under 35 U.S.C. § 103.

Only those arguments actually made by Appellants have been considered in this decision. Arguments that Appellants could have made but chose not to make in the brief have not been considered. We deem such arguments to be waived by Appellants [see 37 CFR § 41.37(c)(1)(vii) effective September 13, 2004 replacing 37 CFR § 1.192(a)].

Appellants argue claims separately and explain why the claims are believed to be separately patentable in three groupings:

Claims 13-20, which we label as Group I;

Claims 21-28, which we label as Group II; and

² Appellants filed an appeal brief on August 18, 2003. Appellants filed a reply brief on January 14, 2004. The Examiner mailed an Examiner's Answer on November 4, 2003.

Claims 29-31, which we label as Group III.

Appellants have fully met the requirements of 37 CFR § 1.192 (c)(7) (July 1, 2002) as amended at 62 Fed. Reg. 53169 (October 10, 1997), which was controlling at the time of Appellants' filing of the brief. 37 CFR § 1.192 (c)(7) states:

Grouping of claims. For each ground of rejection which appellant contests and which applies to a group of two or more claims, the Board shall select a single claim from the group and shall decide the appeal as to the ground of rejection on the basis of that claim alone unless a statement is included that the claims of the group do not stand or fall together and, in the argument under paragraph (c)(8) of this section, appellant explains why the claims of the group are believed to be separately patentable. Merely pointing out differences in what the claims cover is not an argument as to why the claims are separately patentable.

We will, thereby, consider Appellants' claims as standing or falling together in the three groups noted above, and we will treat:

Claim 13 as a representative claim of Group I;

Claim 21 as a representative claim of Group II; and

Claim 29 as a representative claim of Group III.

I. Whether the Rejection of Claims 13-20 Under 35 U.S.C. § 103 is proper?

It is our view, after consideration of the record before us, that the evidence relied upon and the level of skill in the particular art would have suggested to one of ordinary skill in the art the invention as set forth in claims 13-20. Accordingly, we affirm.

In rejecting claims under 35 U.S.C. § 103, the Examiner bears the initial burden of establishing a **prima facie** case of obviousness. **In re Oetiker**, 977 F.2d 1443, 1445, 24 USPQ2d 1443, 1444 (Fed. Cir. 1992). **See also In re Piasecki**, 745 F.2d 1468, 1472, 223 USPQ

785, 788 (Fed. Cir. 1984). The Examiner can satisfy this burden by showing that some objective teaching in the prior art or knowledge generally available to one of ordinary skill in the art suggests the claimed subject matter. **In re Fine**, 837 F.2d 1071, 1074, 5 USPQ2d 1596, 1598 (Fed. Cir. 1988). Only if this initial burden is met does the burden of coming forward with evidence or argument shift to the Appellants. **Oetiker**, 977 F.2d at 1445, 24 USPQ2d at 1444. See also **Piasecki**, 745 F.2d at 1472, 223 USPQ at 788.

An obviousness analysis commences with a review and consideration of all the pertinent evidence and arguments. “In reviewing the [E]xaminer’s decision on appeal, the Board must necessarily weigh all of the evidence and argument.” **Oetiker**, 977 F.2d at 1445, 24 USPQ2d at 1444. “[T]he Board must not only assure that the requisite findings are made, based on evidence of record, but must also explain the reasoning by which the findings are deemed to support the agency’s conclusion.” **In re Lee**, 277 F.3d 1338, 1344, 61 USPQ2d 1430, 1434 (Fed. Cir. 2002).

With respect to independent claim 13, Appellants argue at pages 3-5 of the brief, that Freese fails to teach the “twisted together” feature of claim 13. Appellants then point out that there is a difference between wire twisted about the axis of the cable and wire twisted about its own axis. The Appellant goes on to argue, “[t]he term ‘together’ would have no meaning if twisting about its own axis were intended [by the limitation of claim 13].” We find Appellants’ argument unpersuasive.

To determine whether claim 13 would have been obvious over the references, we must first determine the scope of the claim. Appellants’ specification shows a cable formed from plural wires at figure 2. Appellant argues that “twisted together” should be narrowly defined as

twisted about the axis of the cable. Note that Appellants' figures 2 and 3 shows such a twisting together. However, Appellants' figure 2 also shows that the wires are twisted into a single group.

Our reviewing court states in **In re Zletz**, 893 F.2d 319, 321, 13 USPQ2d 1320, 1322 (Fed. Cir. 1989) that "claims must be interpreted as broadly as their terms reasonably allow." Our reviewing court further states, "[t]he terms used in the claims bear a 'heavy presumption' that they mean what they say and have the ordinary meaning that would be attributed to those words by persons skilled in the relevant art." **Texas Digital Sys. Inc v. Telegenix Inc.**, 308 F.3d 1193, 1202, 64 USPQ2d 1812, 1817 (Fed. Cir. 2002), **cert. denied**, 538 U.S. 1058 (2003).

Upon our review of Appellants' specification, we fail to find any definition of the term "together" that is different from the ordinary meaning. We find the ordinary meaning of the term "together" is best found in the dictionary. We note that the definition most suitable for "together" is "into a single group".³

We appreciate Appellants' position that "twisting together" is only a twisting about the axis of the cable. However, we find that the claim language does not preclude reading on twisting into a single group that uses twisting wire about its own axis. We separately note that Freese specifically teaches that his wires are "twisted together" at column 1, line 19.

Appellants also argue at page 6 of the brief and pages 1-2 of the reply brief that there is not a proper motivation for combining the Lutke and Freese references. Appellants contend that the motivation for combining "should derive from the references themselves," and "cannot come from the Appellants' invention itself." In the situation before us, Appellants contend that the motivation comes from the background section of the present application. Even if we were to

³ The American Heritage Dictionary, Second College Edition, 1982, page 1275. Copy provided to Appellant.

accept as fact that the motivation comes from Appellants' background section of the application, we fail to find any Examiner error.

We find that the Examiner has set forth sufficient motivation for the rejection before us. While it is correct that motivation cannot come from Appellants' invention itself, there is no such preclusion from using Appellants' statements about the known prior art and known problems therein. Further, there is no requirement that the motivation derive from the references themselves. Rather the motivation may come from the nature of the problem to be solved. "While this court indeed warns against employing hindsight, its counsel is just that – a warning. That warning does not provide a rule of law that an express, written motivation to combine must appear in prior art references before a finding of obviousness. Stated differently, this court has consistently stated that a court or examiner may find a motivation to combine prior art references in the nature of the problem to be solved." **Ruiz v. A.B. Chance Co.**, 357 F.3d 1270, 1276, 69 USPQ2d 1686, 1690 (Fed. Cir. 2004); **Also Pro-Mold & Tool Co. v. Great Lake Plastic Inc.**, 75 F.3d 1568, 1573, 37 USPQ2d 1626, 1630; **In re Huang**, 100 F.3d 135, 139 n.5; 40 USPQ2d 1685, 1688 n.5 (Fed. Cir. 1996).

Therefore, we will sustain the Examiner's rejection under 35 U.S.C. § 103.

II. Whether the Rejection of Claims 21-28 Under 35 U.S.C. § 103 is proper?

It is our view, after consideration of the record before us, that the evidence relied upon and the level of skill in the particular art would not have suggested to one of ordinary skill in the art the invention as set forth in claims 21-28. Accordingly, we reverse.

With respect to independent claim 21, Appellants argue combining Bachmann with Lutke “would certainly not be a waveguide like that claimed in claim 21.” We agree.

Although Appellants have not supported this argument by citing to specific limitations in claim 21, we readily find such a limitation in the claim. While we agree with the Examiner that Bachmann teaches “a plurality of pieces” and “at least one flexible intermediate piece,” we do not find that the pieces are “connected to one another” via the flexible intermediate piece, as claim 21 requires.

Upon our review of Appellants’ specification, we fail to find any definition of the term “connected” that is different from the ordinary meaning. We find the ordinary meaning of the term “connected” is best found in the dictionary. We note that the definition most suitable for “connected” is “joined or fastened together.”⁴

We find that claim 21 requires that the flexible intermediate piece serve to join or fasten together the plurality of pieces, and if the flexible intermediate piece were removed then the waveguide would fall apart. This cannot be said of Bachmann. If the supporting member of Bachmann were removed, the waveguide would still exist. Therefore, we do not find that the plurality of pieces are connected to one another via the flexible intermediate piece. Rather, it is the other structural components of the cable that connect together the plurality of pieces in Bachmann. At most, Bachmann teaches that the central supporting member 2 (flexible intermediate piece) touches conductor bundles 3 (the plurality of pieces), and touching does not equal joining or fastening together.

Therefore, we will not sustain the Examiner’s rejection under 35 U.S.C. § 103.

⁴ The American Heritage Dictionary, Second College Edition, 1982, page 311. Copy provided to Appellant.

III. Whether the Rejection of Claims 29-31 Under 35 U.S.C. § 103 is proper?

It is our view, after consideration of the record before us, that the evidence relied upon and the level of skill in the particular art would not have suggested to one of ordinary skill in the art the invention as set forth in claims 29-31. Accordingly, we reverse.

With respect to independent claim 29, Appellants argue combining Bachmann with Lutke “would certainly not be a waveguide like that claimed in claim 29.” We agree.

Although Appellants have not supported this argument by citing to specific limitations in claim 29, we readily find such a limitation in the claim. While we agree with the Examiner that Bachmann teaches “a flexible element” and “a metal mesh surrounding the element,” we do not find that the metal mesh surrounds the flexible element “on” its surface, as claim 29 requires. The word “on” requires “contact” with the surface of the flexible element.⁵ Clearly, the disclosure teaches this at figure 4. The same cannot be said of Bachmann’s braided core covering 10, which does not touch the central supporting member 2.

Therefore, we will not sustain the Examiner’s rejection under 35 U.S.C. § 103.

IV. Other Issues

Should there be further prosecution of the present application or a continuation thereof, we recommend that the Examiner review carefully the background section of Appellants’ specification. In our review of Appellants’ background section we find no difference between

⁵ The American Heritage Dictionary, Second College Edition, 1982, pages 867-868. Copy provided to Appellant.

the admitted prior art (the twisted stranded wires embodiments at pages 2-4) and the invention of claim 13.

Conclusion

In view of the foregoing discussion, we have sustained the rejection under 35 U.S.C. § 103 of claims 13-20, and we have not sustained the rejection under 35 U.S.C. § 103 of claims 21-31.

No time period for taking any subsequent action in connection with this appeal may be extended under 37 CFR § 1.136(a)(1)(iv).

AFFIRMED-IN-PART

JAMES D. THOMAS
Administrative Patent Judge

HOWARD B. BLANKENSHIP
Administrative Patent Judge

ALLEN R. MACDONALD
Administrative Patent Judge

BOARD OF PATENT APPEALS AND INTERFERENCES

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